

27/11/24

## LAB-9

- Q) Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num 1 and Num 2. The division of Num 1 and Num 2 is displayed in the result field when the divide button is clicked. If Num 1 or Num 2 were not an integer, the program would throw a `NumberFormatException`. If Num 2 were zero, the program would throw an `ArithmeticException` display the in a message dialog box.

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
```

```
class SwingDemo {
    SwingDemo() {
        JFrame jfrm = new JFrame("Divider app");
        jfrm.setSize(275, 150);
        jfrm.setLayout(new FlowLayout());
        jfrm.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
        JLabel jlal = new JLabel("Enter divisor and dividend:");
```

```
        JTextField ajtf = new JTextField(8);
```

```
        JTextField bjtf = new JTextField(8);
```

```
JButton button = new JButton("Calculate");  
JLabel err = new JLabel();  
JLabel alah = new JLabel();  
JLabel blah = new JLabel();  
JLabel anslah = new JLabel();
```

```
jfrm.add(err);  
jfrm.add(jlah);  
jfrm.add(ajtf);  
jfrm.add(bjtf);  
jfrm.add(button);  
jfrm.add(alah);  
jfrm.add(blah);  
jfrm.add(anslah);
```

```
ActionListener I = new ActionListener();  
public void actionPerformed(ActionEvent evt) {  
    System.out.println("Action event from text field");  
}  
};
```

```
ajtf.addActionListener();  
bjtf.addActionListener();  
button.addActionListener(new ActionListener() {  
    public void actionPerformed(ActionEvent evt) {  
        try {  
            int a = Integer.parseInt(ajtf.getText());  
            int b = Integer.parseInt(bjtf.getText());  
            int ans = a/b;
```



```
alab1.setText("");  
blab1.setText("");  
anslab1.setText("");  
err.setText("Enter only integers!");  
}
```

```
catch (ArithmeticException e) {  
    alab1.setText("");  
    blab1.setText("");  
    anslab1.setText("");  
    err.setText("B should be non zero!");  
}  
});
```

```
jfrm.setVisible(true);  
}
```

```
public static void main (String args[]) {  
    SwingUtilities.invokeLater (new Runnable() {  
        public void run() {  
            new SwingDemo();  
        }  
    });  
}
```

Enter divisor and dividend

10

5

Calculate

$A = 10$   $B = 5$   $Ans = 2$

B should be non zero

Enter divisor and dividend

10

0

Calculate

Seen

Enter only Integers

a

10

Calculate